

Appl. No.

Preliminary Amend. Dated January 22, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Original) A cordless microscope comprising:

a stage for holding specimens to be viewed; and

a light source assembly for illuminating the stage, the light source assembly including -

a circuit board, and

a plurality of LEDs mounted on the circuit board for projecting light toward the stage,

wherein the light source is assembly is removable and replaceable.
2. (Original) The cordless microscope as set forth in claim 1, the light source assembly further including a first connector mounted on the circuit board, electrically connected with the LEDs, and configured for connecting to a battery for powering the LEDs.
3. (Original) The cordless microscope as set forth in claim 1, wherein the light source assembly includes 4 LEDs.

4. (Original) The cordless microscope as set forth in claim 2, the light source assembly further including a second connector mounted on the circuit board and configured for connecting to a switch so as to electrically connect the switch between the battery and the LEDs for switching the LEDs between on and off states.

5. (Original) The cordless microscope as set forth in claim 4, the light source assembly further including a third connector configured for connecting to a battery recharger for recharging the battery.

6. (Original) The cordless microscope as set forth in claim 1, wherein the structure of the LEDs produces a highly-focused angle of illumination so that most of the light from the LEDs is projected upwardly toward the stage.

7. (Original) A light source assembly for use in a microscope, the light source assembly comprising:

a reflective coated circuit board,

a plurality of LEDs mounted on the circuit board for projecting light upwardly from the circuit board, wherein the structure of the LEDs produces a highly-focused angle of illumination so that most of the light from the LEDs is projected upwardly; and

a first connector mounted on or coupled with the circuit board, electrically connected with the LEDs, and configured for connecting to a battery for powering the LEDs.

8. (Original) The light source assembly as set forth in claim 7, further including a second connector mounted on or coupled with the circuit board and configured for connecting to a switch so as to electrically connect the switch between the battery and the LEDs for switching the LEDs between on and off states.

9. (Original) The light source assembly as set forth in claim 7, wherein the circuit board is circular in shape.

10. (Original) The light source assembly as set forth in claim 7, wherein 4 LEDs are mounted on the circuit board.

11. (Original) The light source assembly as set forth in claim 8, further including a third connector configured for connecting to a battery recharger for recharging the battery.

12. (Original) A light source assembly for use in a microscope, the light source assembly comprising:

a circuit board,

a plurality of LEDs mounted on the circuit board for projecting light upwardly from the circuit board, wherein the structure of the LEDs produces a highly-focused angle of illumination so that most of the light from the LEDs is projected upwardly; and

a first connector mounted on or coupled with the circuit board, electrically connected with the LEDs, and configured for connecting to a battery for powering the LEDs.

13. (Original) The light source assembly as set forth in claim 12, further including a second connector mounted on or coupled with the circuit board and configured for connecting to a switch so as to electrically connect the switch between the battery and the LEDs for switching the LEDs between on and off states.

14. (Original) The light source assembly as set forth in claim 12, wherein the circuit board is circular in shape.

15. (Original) The light source assembly as set forth in claim 12, wherein 4 LEDs are mounted on the circuit board.

16. (Original) The light source assembly as set forth in claim 12, wherein the circuit board is coated with a reflective material to reflect light emitted from the LEDs.

17. (Original) The light source assembly as set forth in claim 13, further including a third connector configured for connecting to a battery recharger for recharging the battery.

18. (New) A cordless microscope comprising:
- a stage for holding specimens to be viewed; and
- a light source assembly for illuminating the stage, the light source assembly including -
- at least one light source for projecting light toward the stage,
- a first connector electrically connected with the at least one light source and configured for connecting to a power source for powering the at least one light source,
- a second connector configured for connecting to a switch so as to electrically connect the switch between the power source and the at least one light source for switching the at least one light source between on and off states, and
- a third connector configured for connecting to a power source recharger for recharging the power source.
19. (New) The cordless microscope as set forth in claim 18, wherein the light source is a light emitting diode.
20. (New) The cordless microscope as set forth in claim 19, wherein the power source is at least one battery.

21. (New) A cordless microscope comprising:

a stand;

a stage supported by the stand for holding specimens to be viewed;

an objective lens supported by the stand for magnifying an image of a specimen on the stage;

an eyepiece lens supported by the stand and coupled with the objective lens for further

magnifying the image of the specimen and for permitting a user to view the image;

and

a light source assembly for illuminating the stage, the light source assembly including -

at least one light source for projecting light toward the stage, wherein the at least one

light source emits white light, and

a connector electrically connected with the at least one light source and configured for

connecting to a power source for powering the at least one light source,

wherein the light source assembly is operable to provide over forty hours of

continuous operation of the cordless microscope.

22. (New) The cordless microscope as claimed in claim 21, wherein the light source is a light emitting diode.

23. (New) The cordless microscope as claimed in claim 21, wherein the at least one light source is operable to provide over five thousand millicandellas of illumination.